

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims

1. (Previously presented) An isolated and purified having an amino acid sequence selected from the group consisting of:

RVVRVVRRVVRR (SEQ ID NO:4);

RRVVRRVRRVVRRVVRRVVRR (SEQ ID NO: 5);

VRRVVRRVVRRVVRRVVRRVVRRVVRRVVRR (SEQ ID NO: 6);

RRVVRRVRRVVRRVVRRVVRRVVRRVVRRVVRR

(SEQ ID NO:7);

RVVRVVRRVVRRVRRVVRRVVRRVVRRVVRRVVRR

VRR (SEQ ID NO:8);

RVVRVVRRWVRR (SEQ ID NO:9);

RRWVRRVRRVVWRVVRRVVWRVVRR (SEQ ID NO:10);

VRRVVWRVVWRVVWRVVWRVVWRVVWRVVWRVVWR

NO:11); and

RVVRVVRRWVRRVRRVVWRVVRRVVWRVVWRVVWRVV

WRVV (SEQ ID NO:12).

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Original) The peptide of claim 1 having the amino acid sequence:

RVVRRVRRVVRR (SEQ ID NO:4)

9. (Original) A composition comprising the peptide of claim 8 and a carrier.

10. (Original) The peptide of claim 1 having the amino acid sequence:

RRVVRRVRRVVRRVVRR (SEQ ID NO: 5).

11. (Original) A composition comprising the peptide of claim 10 and a carrier.

12. (Original) The peptide of claim 1 having the amino acid sequence:

VRRVVRRVRRVVRRVVRR (SEQ ID NO: 6).

13. (Original) A composition comprising the peptide of claim 12 and a carrier.

14. (Original) The peptide of claim 1 having the amino acid sequence:

RRVVRRVRRVVRRVVRR (SEQ ID NO:7);

15. (Original) A composition comprising the peptide of claim 14 and a carrier.

16. (Original) The peptide of claim 1 having the amino acid sequence:

RVVRRVRRVRRVVRR (SEQ ID NO:8).

17. (Original) A composition comprising the peptide of claim 16 and a carrier.

18. (Original) The peptide of claim 1 having the amino acid sequence:

RVVRRVRRWVRR (SEQ ID NO:9).

19. (Original) A composition comprising the peptide of claim 18 and a carrier.

20. (Original) The peptide of claim 1 having the amino acid sequence:

RRWVRRVRRVWR (SEQ ID NO:10).

21. (Original) A composition comprising the peptide of claim 20 and a carrier.

22. (Original) The peptide of claim 1 having the amino acid sequence:

VRRVWRRVVRRVWRVRRVRRVWRVVRRVWR (SEQ ID

NO:11);

23. (Original) A composition comprising the peptide of claim 23 and a carrier.

24. (Original) The peptide of claim 1 having the amino acid sequence:

RVVRVVRRWVRRVRRVWRVVRRVVRVRRWVRRVRRVWRVVRR

WRVV (SEQ ID NO:12).

25. (Original) A composition comprising the peptide of claim 24 and a carrier.

26. (Original) The peptide of claim 1 wherein said peptide has antimicrobial activity.

27. (Previously presented) The peptide of claim 1 wherein said peptide has

antimicrobial activity in a low salt medium.

28. (Previously presented) The peptide of claim 1 wherein said peptide has

antimicrobial activity in physiological salt.

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Previously presented) An isolated and purified lentiviral lytic peptide-1 peptide analog-comprising an amino acid sequence selected from the group consisting of:

RVVRVVRRVVRR (SEQ ID NO:4);

RRVVRRVRRVVRRVVRVRRVRR (SEQ ID NO: 5);

VRRVVRRVVRVVRVRRVRRVRRVVRRVVRRVVRR (SEQ ID NO: 6);
RRVVRRVRRVVRVVRVVRVRRVRRVRRVVRRVVRR
(SEQ ID NO:7);
RVVRRVRRVVRVRRVVRVVRVVRVRRVRRVRRVVRRV
VRR (SEQ ID NO:8);
RVVRRVRRWVRR (SEQ ID NO:9);
RRWVRRVRRVWRVWRVVRVRRWVRR (SEQ ID NO:10);
VRRVWRRVVRVVRVWRVWRVRRVRRVWRVWRVWRV
NO:11); and
RVVRRVRRWVRRVRRVWRVWRVVRVRRWVRRVRRVWRV
WRVV (SEQ ID NO:12),

and at least one additional residue wherein said peptide analog comprises an amphipathic α -helical structure.

35. (Previously presented) A solid phase substrate comprising at least one peptide selected from the group consisting of:

RVVRRVRRVVRR (SEQ ID NO:4);
RRVVRRVRRVVRVVRVVRVRRVVRR (SEQ ID NO: 5);
VRRVVRRVVRVVRVVRVRRVRRVVRVVRVVRVRR (SEQ ID NO: 6);
RRVVRRVRRVVRVVRVVRVRRVRRVVRVVRVVRVRR
(SEQ ID NO:7);
RVVRRVRRVVRVRRVVRVVRVVRVRRVRRVVRVVRV
VRR (SEQ ID NO:8);
RVVRRVRRWVRR (SEQ ID NO:9);

RRWVRRVRRVWRRVVRRWVRR (SEQ ID NO:10);
VRRVWRRVVRVWRVRRWVRRVRRVWRVRRVVRVRRWVRR (SEQ ID
NO:11); and
RVVRVVRRWVRRVRRVWRVRRVVRVRRWVRRVRRVWRVRRVVR
WRVV (SEQ ID NO:12).

36. (Original) The solid phase substrate of claim 35 wherein said solid phase substrate is a prosthetic device.
 37. (Original) The solid phase substrate of claim 35 wherein the prosthetic device is a prosthetic joint.
 38. (Previously presented) The peptide of claim 1 wherein said peptide further comprises at least one cysteine residue.
 39. (Original) The peptide of claim 39 wherein said peptide is a disulfide linked dimeric peptide.
 40. (Previously presented) An isolated and purified peptide-cargo complex comprising a cargo and a peptide selected from the group consisting of:

RVVRVVRRVVRR (SEQ ID NO:4);
RRVVRRVRRVVRRVVRRVVRR (SEQ ID NO: 5);
VRRVVRRVVRRVVRRVVRRVVRRVVRR (SEQ ID NO:
6);
RRVVRRVRRVVRRVVRRVVRRVVRRVVRRVVRR
(SEQ ID NO:7);
RVVRVVRRVVRRVRRVVRRVVRRVVRRVVRRVVRR
VRR (SEQ ID NO:8);

RVVRRVVRRWVRR (SEQ ID NO:9);

RRWVRRVRRVWRRVVRRVWRRWVRR (SEQ ID NO:10);

VRRVWRRVVVRVWVRRVRRVWRRVVRRVWRR (SEQ ID

NO:11); and

RVVRRVVRRWVRRVRRVWRRVVRRWVRRVRRVWRRVVRR
WRVV (SEQ ID NO:12).

41. (Original) The peptide-cargo complex of claim 40 wherein said peptide has antimicrobial activity and said cargo increases the antimicrobial activity of said peptide.

42-65 (Cancelled)

Please cancel claims 29-33.